

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2003-177266

(43)Date of publication of application : 27.06.2003

(51)Int.Cl.

G02B 6/22
G02B 6/17
G02F 1/365

(21)Application number : 2002-084215

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(22)Date of filing : 25.03.2002

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(30)Priority

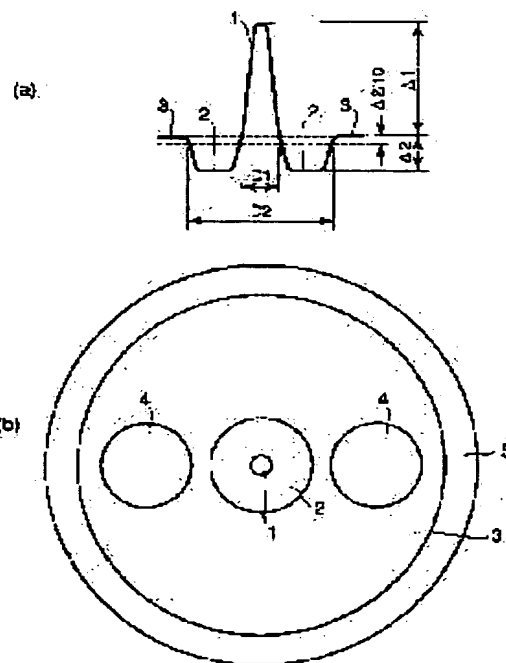
Priority number : 2001308932 Priority date : 04.10.2001 Priority country : JP

(54) NONLINEAR DISPERSION SHIFT OPTICAL FIBER AND OPTICAL SIGNAL PROCESSING DEVICE AND WAVELENGTH CONVERTER USING THE OPTICAL FIBER

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a practical nonlinear dispersion shift optical fiber suitable for wavelength conversion or optical signal processing using nonlinear phenomenon and easily manufactured.

SOLUTION: The wavelength dispersion at 1550 nm wavelength is controlled to the designed value required for optical signal processing using nonlinear phenomenon. The gradient of the wavelength dispersion at 1550 nm wavelength is specified to 0.001 to 0.1 ps/nm²/km. The margin of fluctuation of the wavelength dispersion in the longitudinal direction of the optical fiber at 1550 nm wavelength is specified to 0.01 to 3 ps/nm/km. The nonlinear constant n_2/A_{eff} at 1550 nm wavelength is specified to $\geq 15 \times 10^{-10}/W$.



LEGAL STATUS

[Date of request for examination]

01.11.2004

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]